

# HISTORIC PROPERTY INVENTORY FORM

## IDENTIFICATION SECTION

Field Site No. 117-B OAHP No. \_\_\_\_\_ Date Recorded 18-Dec-98  
Site Name Historic Exhaust Air Filter Building  
Common \_\_\_\_\_  
Field Recorder Jim Sharpe  
Owner's Name U.S. Department of Energy, Richland Operations Office  
Address P.O. Box 550  
City/State/Zip Code Richland, WA 99352

### Status

- ☒ Survey/Inventory  
☐ National Register  
☐ State Register  
☐ Determined Eligible  
☐ Determined Not Eligible  
☐ Other (HABS, HAER, NHL)  
☐ Local Designation

### Photography

Photography Neg. No. 106669-22cn  
(Roll No. & Frame No.)  
View of \_\_\_\_\_  
Date \_\_\_\_\_

Classification ☐ District ☐ Site ☐ Building ☒ Structure ☐ Object  
District Status ☒ NR ☐ SR ☐ LR ☐ INV  
Contributing ☒ Non-Contributing ☐  
District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Historic District

## Description Section

### Materials & Features/Structural Types

Building Type Industry  
Plan \_\_\_\_\_  
Structural System \_\_\_\_\_  
No. of Stories \_\_\_\_\_

### Roof Type

☐ Gable ☐ Hip  
☒ Flat ☐ Pyramidal  
☐ Monitor ☐ Other (specify) \_\_\_\_\_  
☐ Gambrel \_\_\_\_\_  
☐ Shed \_\_\_\_\_

### Cladding (exterior Wall Surfaces)

- ☐ Log  
☐ Horizontal Wood Siding  
Rustic/Drop ☐  
Clapboard ☐

- ☐ Wood Shingle  
☐ Board and Batten  
☐ Vertical Board  
☐ Asbestos/Asphalt  
☐ Brick  
☐ Stone  
☐ Stucco  
☐ Terra Cotta  
☒ Concrete/Concrete Block  
☐ Vinyl/Aluminum Siding  
☐ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_

### Roof Material

☐ Wood Shingle  
☐ Wood Shake  
☐ Composition  
☐ Slate  
☐ Tar/Built-up  
☐ Tile  
☒ Metal (specify) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_  
☐ Not visible

### Foundation

☐ Log ☐ Concrete  
☐ Post & Pier ☐ Block  
☐ Stone ☐ Poured  
☐ Brick ☐ Other (specify) \_\_\_\_\_  
☒ Not visible

### Integrity

(Include detailed description in  
Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Buried in place</u>				

State of Washington, Department of Community Development  
Office of Archaeology and Historic Preservation  
111 21st Avenue Southwest, Post Office Box 48343  
Olympia, Washington 98504-8343 (206)753-4011

## LOCATION SECTION

Address Building, 117-B, 100-B Area  
City/Town/County/Zip Code Richland/Benton County/99352  
Twp 13 N. Range 25 E. Section 11 1/4 Section NW 1/4 1/4 Sec SW  
Tax No./Parcel No. \_\_\_\_\_ Acreage \_\_\_\_\_  
Quadrangle or map name Vernita Bridge, 1986  
UTM References Zone 11 Easting 297480 Northing 5167160  
Plat/Block/Lot \_\_\_\_\_  
Supplemental Map(s) \_\_\_\_\_



### High Styles/Forms (Check one or more of the following)

<input type="checkbox"/> Greek Revival	<input type="checkbox"/> Spanish Colonial Revival/Mediterranean
<input type="checkbox"/> Gothic Revival	<input type="checkbox"/> Tudor Revival
<input type="checkbox"/> Italianate	<input type="checkbox"/> Craftsman/Arts & Crafts
<input type="checkbox"/> Second Empire	<input type="checkbox"/> Bungalow
<input type="checkbox"/> Romanesque Revival	<input type="checkbox"/> Prairie Style
<input type="checkbox"/> Stick Style	<input type="checkbox"/> Art Deco/Art Moderne
<input type="checkbox"/> Queen Anne	<input type="checkbox"/> Rustic Style
<input type="checkbox"/> Shingle Style	<input type="checkbox"/> International Style
<input type="checkbox"/> Colonial Revival	<input type="checkbox"/> Northwest Style
<input type="checkbox"/> Beaux Arts/Neoclassical	<input type="checkbox"/> Commercial Vernacular
<input type="checkbox"/> Chicago/Commercial Style	<input type="checkbox"/> Residential Vernacular (see below)
<input type="checkbox"/> American Foursquare	<input checked="" type="checkbox"/> Other (specify)
<input type="checkbox"/> Mission Revival	<u>Industrial Vernacular</u>

### Vernacular House Types

<input type="checkbox"/> Gable Front	<input type="checkbox"/> Cross Gable
<input type="checkbox"/> Gable Front and Wing	<input type="checkbox"/> Pyramidal/Hipped
<input type="checkbox"/> Side Gable	<input checked="" type="checkbox"/> Other (specify)
	<u>Industrial Vernacular</u>

## NARRATIVE SECTION

### Study Unit Themes (check one or more of the following)

☐ Agriculture  
☐ Architecture/Landscape Architecture  
☐ Arts  
☐ Commerce  
☐ Communications  
☐ Community Planning/Development

☐ Conservation  
☐ Education  
☐ Entertainment/Recreation  
☐ Ethnic Heritage (specify) \_\_\_\_\_  
☐ Health/Medicine  
☐ Manufacturing/Industry  
☐ Military

☐ Politics/Government/Law  
☐ Religion  
☐ Science & Engineering  
☐ Social Movements/Organizations  
☐ Transportation  
☒ Other (specify) Manhattan Project & Cold War Era  
☒ **Study Unit Sub-Theme(s)** Waste Management (air)

### Statement of Significance

Date of Construction 1961 Architect/Engineer/Builder General Electric Company

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 117-B Exhaust Air Filter Building (132-B-4) filtered ventilation air from the confinement zone of the 105-B Reactor Building prior to its discharge to the atmosphere. During operations it received exhaust fan discharge air through an inlet duct, filtered the air through both absolute and activated charcoal filtersthen discharged it through the exhaust stack (116-B). The facility operted from 1961 to 1968.

It is the conclusion of the U.S. Department of Energy that the 117-B Exhaust Filter Building, through its role in waste management, is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

### Description of Physical Appearance

The 117-B Exhaust Air Filter Building was a single story building located about 100 feet directly south of the 105-B Reactor Building. It was constructed of reinforced concrete almost completely below grade. It contained two identical filter cells with an operating gallery between the cells. Each filter cell contained two filter banks. The first filter cell was an absolute type filter and the second was activated charcoal. The roof was constructed of a steel frame with large steel hatch covers that served as doors. The walls were constructed of reinforced concrete. The facility was 8-feet above grade, 27-feet below grade, 57-feet long, and 37-feet wide. The inlet tunnel received exhust air from the reactor building and was about 110 feet long. The outlet tunnel lead to the exhaust stack and was about 80 feet long. The facility was decommissioned and burieed in place in 1987 and 1988.

### Major Bibliographic References

AEC-GE. 1964. *Catalog of Hanford Buildings and Facilities 100 Areas*. GEH-26434. Richland, Washington.

UNC Nuclear Industries. 1984. *100 Deactivated Area Pictorial Review*. UNI-2780. Richland, Washington.

Westinghouse Hanford Company. 1994. *100-B Area Technical Baseline Report*. WHC-SD-EN-TI-220. Richland, Washington.

Reference drawings: H-1-19835 and H-1-19836